



ELEMENTS[®]
QUÍMICA APLICADA

e5 SUSTINER m



**GREEN COVENANT
WITH OUR PLANET**

Description

e⁵ Sustineri M is an admixture designed for concrete manufacturing. It's a high tech water reducer and retardant, designed and manufactured by Element5.

It contains resilient raw materials that were designed, modified and reused to break up the flocculating effect of cement particles, as these enter in contact with water. It's manufactured with biopolymer retarding dispersants and rheology modifiers.

In this way, due to the nature of its components, this product is high tech and friendly with the environment.

With its special formula, it improves cement's hydration. This is evidenced by the increments in concrete mechanical strengths. These increases in strength are greater than those presented by traditional admixtures of the same category.

There are aggregates or cements in the market that, in combination with certain admixtures, generate greater air contents in concrete. This diminishes the properties of the concrete. To avoid these problems we recommend the use of this product.

e⁵ Sustineri M allows water reductions and mechanical strength increments in concrete. In this manner this admixture widely complies with the requirements of ASTM C-494 Type D as well as those of NMX-C-255-ONNCCE.

Setting times can be modulated as a function of ambient conditions and the type of materials that will be used.

This kind of product, by being manufactured with a considerable concentration of biopolymers, helps to mitigate the carbon footprint. Hence the descriptive name "Sustineri" that means sustainable.



Benefits

Using e⁵SustineriM in concrete:

- It's manufactured with raw materials that help to reduce the carbon footprint.
Helps to retain fresh concrete mix consistency for a longer time.
- It allows satisfactory mixing of concrete in warm climates.
- It significantly increases mechanical strengths.
Improves the rheological properties of concrete.
- It reduces concrete's permeability.
Reduces the water / binding materials ratio.
- It increases the durability of concrete.
Reduces the manufacturing cost per m³ of concrete.

Presentation

- 18 L pail
- 200 L drum
- 1,000 L tote
- Bulk

Useful life: 12 months in its original container

Principal applications

- Conventional concretes
- Pumpable concretes
- Structural concrete

Technical Information

- Specific gravity: 1.20
- Physical appearance: Dark brown liquid



Directions for use

For better results we recommend conducting lab tests with the job materials. This allows making all the necessary adjustments in the concrete mix. These can be: appearance, workability, consistency, air content, yield, setting times and admixture dosages.

Then, it is important to repeat these tests at an industrial level. This will allow seeing the behavior of the concrete mix under real job conditions (moisture, temperature, time to transport fresh concrete, etc.). This allows making the final adjustments.

Add **e5 SUSTINERI M** along with 80 % of the mix water during the preparation of the concrete mix. Load aggregates and cement following the established order. Once all the materials have been loaded, including the remaining 20 % of the mix water, mix all the materials during one minute for each m³ of concrete at mixing speed.

Never add the admixture on the cement without its prior initial hydration or directly on the aggregates.

Dosages can vary from 4 to 11 mL / kg of cement. The dosage is established depending on the concrete mix design to be used.

When used in conjunction with integral waterproofers, it's necessary to check the air content and the setting times of the concrete mix.

Consult with your **Element5** Integral Solutions Advisor (Asesor de Soluciones Integrales de Element5), for additional information.

For questions or comments on the use of this product, contact our **Element5** Technical Support Department (Departamento de Soporte Técnico de **Element5**.)



Cautions

- Do not allow the product to freeze.
- Always keep the product in its original container.
- Never add the admixture with the aggregates or to the cement, without its prior initial hydration. These actions will decrease the efficiency of the admixture.
- In the event of any important variation in materials (change of aggregates, cement, etc.), it is necessary to make the required adjustments on the established dosages.
- Admixture overdosage can cause delays in the speed of hydration of the cement, along with high air content.

Element5 Química Aplicada S.A. de C.V. garantiza que el producto cumple con la calidad establecida y está exento de problemas de fabricación. Cuando el producto se encuentra fuera de la fecha de caducidad y una vez manipulado por el usuario, **Element5 Química Aplicada S.A. de C.V.** no extiende ningún tipo de garantía adicional, ya que no tenemos control de variables presentes en la aplicación o manipulación del producto. El presente documento sólo contiene recomendaciones generales. La interpretación técnica que se derive en la especificación de nuestros productos es responsabilidad total del usuario. No se contempla lo que no está escrito en este documento y garantía. Si es necesario conocer a detalle algún dato referente a los productos o a las recomendaciones de las cuales se desprenden los procedimientos enunciados, contactar al Departamento de Soporte Técnico de **Element5 Química Aplicada S.A. de C.V.** así como visitar nuestra página web, donde se pone nuestro aviso de privacidad.

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